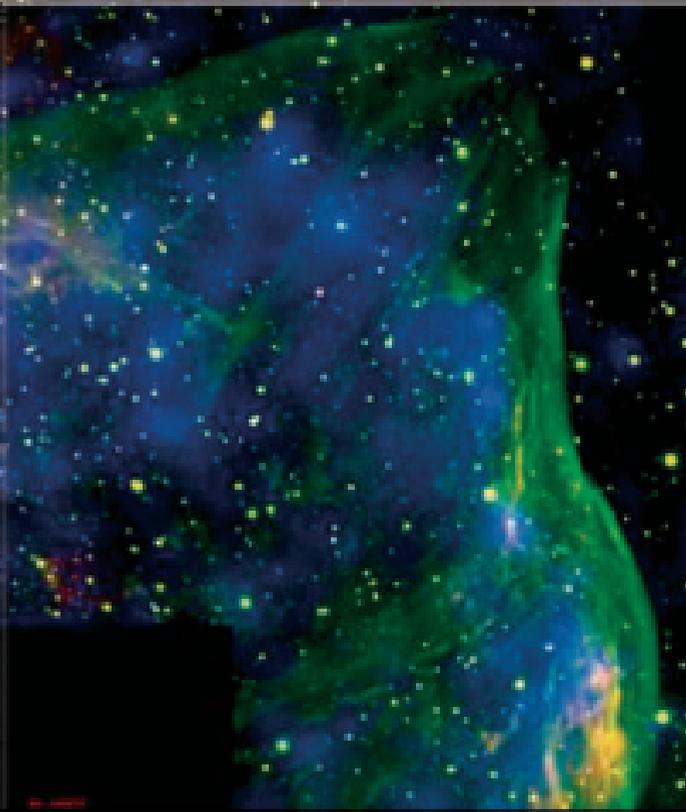
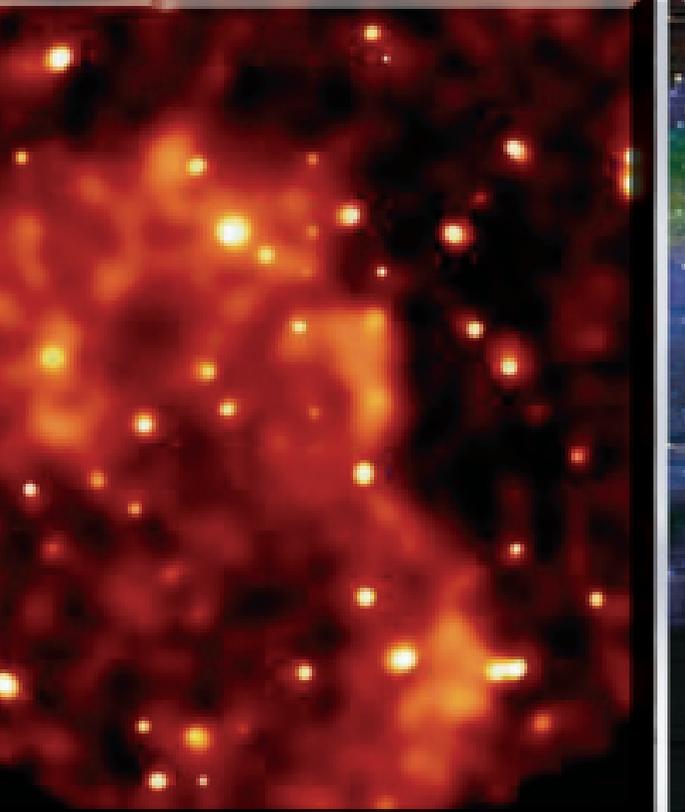


DYING STAR



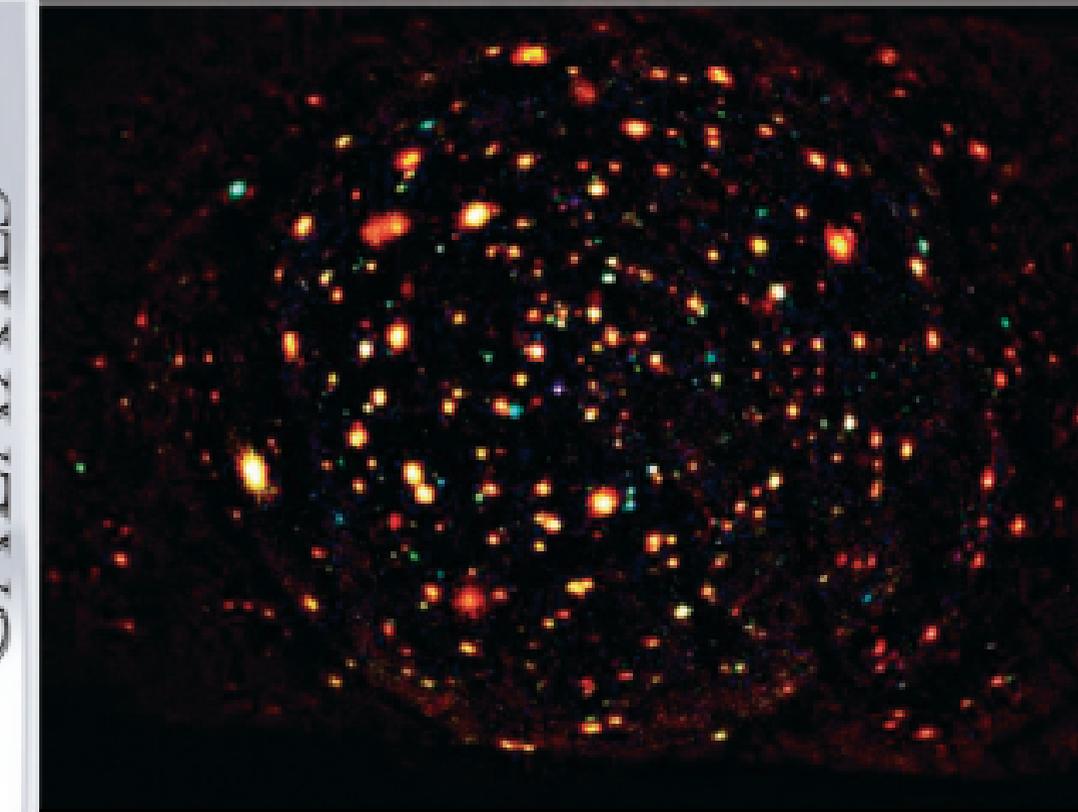
GAS BUBBLE



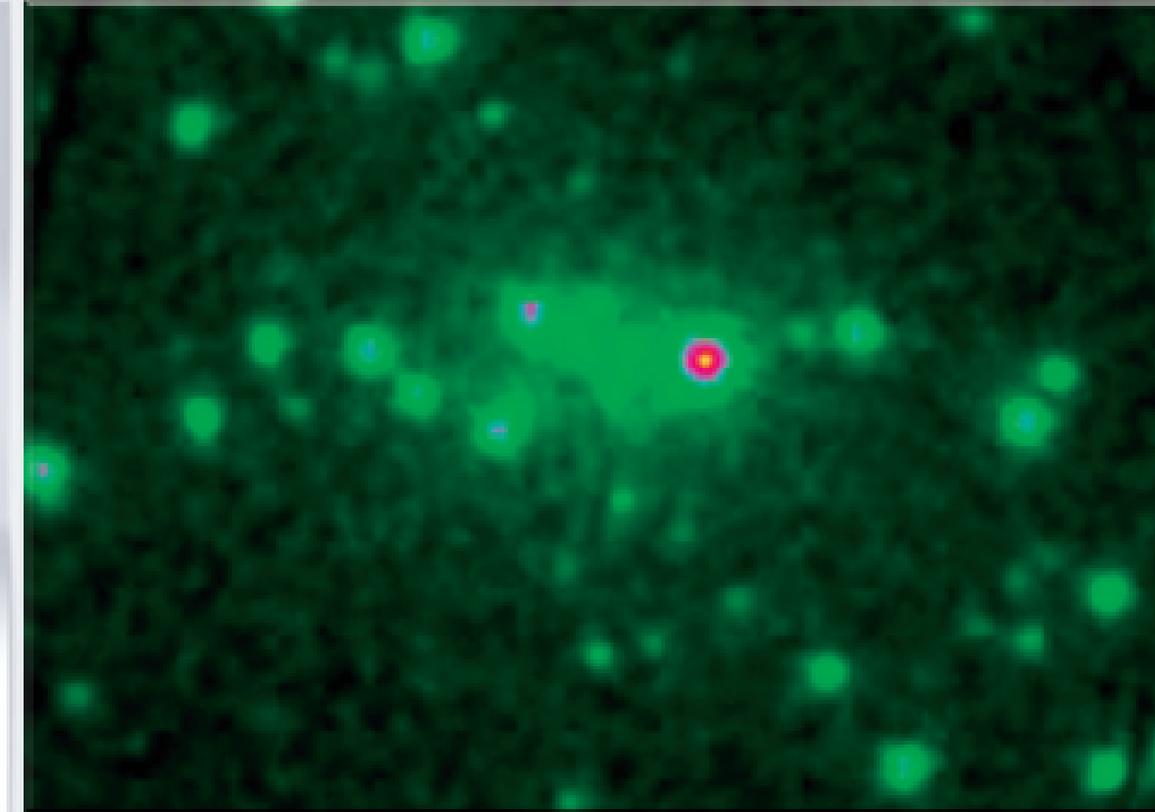
XMM-NEWTON



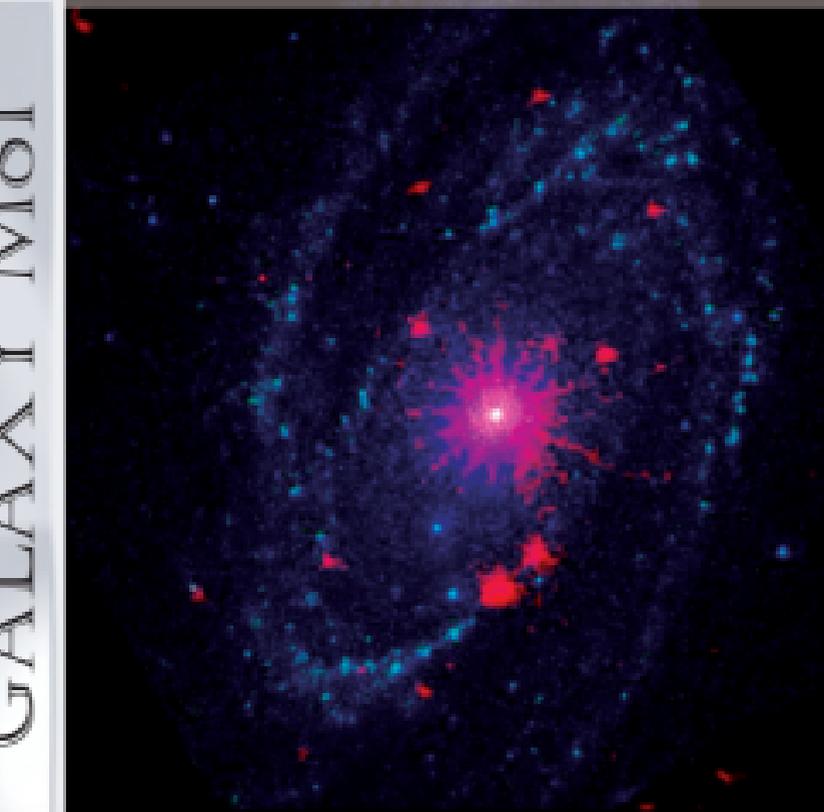
GALAXIES



ANDROMEDA



GALAXY M81





### Dying Star

NGC 7009 is a shell of gas blown off by a dying star. X-rays seen by XMM-Newton (blue) are displayed over light from cooler gas (green & red).

### Gas Bubble

S308 is a gas bubble illuminated by a very hot, very massive star in its center. The left image shows just the X-rays, and the right shows the X-rays (blue) with the optical light (red & green).

### XMM-Newton

The XMM-Newton satellite is multi-national orbiting observatory which detects high energy light called X-rays. Only very energetic objects such as dying stars and black holes emit X-rays.

### Galaxies

Over 400 galaxies located at vast distances can be seen in this deep XMM-Newton image. Each object represents an entire galaxy's X-ray output.

### Andromeda

The Andromeda Galaxy is the nearest spiral galaxy like our own. This XMM-Newton image shows black holes, dense neutron stars and super-heated gas located in Andromeda's heart.

### Galaxy M81

M81, another spiral galaxy, pours out X-rays from its center. X-rays (red) are shown with cooler gas and star-forming regions (blue & green).

Images courtesy of ESA. For more information about XMM-Newton and these images, please visit the E/PO Site: <http://xmm.sonoma.edu/edu/ruler.html>

Science Site: <http://xmm.vilspa.esa.es/>